

REMARKS

This responds to the Office Action mailed on February 1, 2007.

Claims 19, 21, 25, 27, and 29 are amended, claims 20 and 26 are canceled without prejudice or disclaimer; as a result, claims 1-19, 21-25, and 27-29 are now pending in this application.

Objection to the Drawings

The drawings were objected to under 37 MPEP § 608.02(g). The rejection asserts: "Figure 1 should be designated by a legend such as –Prior Art—because only that which is old is illustrated." The rejection does not provide support for this assertion. Consequently, Applicant respectfully traverses the assertion and requests support in the next official communication, or withdrawal of the assertion.

Claim Objections

Claims 26 and 29 were objected for minor informalities which have been corrected by this Amendment.

Claim 26 has been canceled without prejudice or disclaimer.

Claim 29 has been amended as suggested in the Office Action.

Applicant believes that the amendment has overcome the objection.

§103 Rejection of the Claims

Claims 19-20, 22-24 and 28-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Banquy (U.S. Patent No. 4,782,096, herein "Banquy") in view of Davis et al. ("Cryogenics for Syngas Processing", *Chemical Engineering Progress*, February 1980, pages 72-79, herein "Davis").

Claim 19

Claim 19 has been amended to better describe the recited subject matter.

As amended, claim 19 includes elements of claims 20 and 26, which have been canceled without prejudice or disclaimer. Therefore, the rejection of claims 20 and 26 as applied to amended claim 19 is addressed below.

Applicant respectfully traverses the rejection and submits that the Office Action does not set forth a *prima facie* case of obviousness because the proposed combination of references is improper. For example, Applicant is unable to find in Davis its methane wash approach produces the first cryogenic liquid comprising unreacted carbon monoxide and unreacted hydrogen as recited in claim 19. The lack of such a first cryogenic liquid teaches away from including the "second liquid methane wash column" (or the second absorption zone 19 in Martin, see below) in the apparatus.

Applicant respectfully requests reconsideration and allowance of claim 19.

Claim 20, 22-24 and 28-29

Claim 20 has been canceled without prejudice or disclaimer. Applicant respectfully traverses the rejection. Claims 22-24 and 28-29 are dependent on claim 19, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 19 is incorporated herein to support the patentability of claims 22-24 and 28-29.

Applicant respectfully requests reconsideration and allowance of claims 22-24 and 28-29.

Claim 21 was rejected under 35 USC § 103(a) as being unpatentable over Banquy in view of Davis, as applied to claim 19 above, and further in view of Ireland et al. (U.S. Patent No. 4,044,063).

Applicant respectfully traverses the rejection. Claim 21 is dependent on claim 19, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 19 is incorporated herein to support the patentability of claim 21.

Applicant respectfully requests reconsideration and allowance of claim 21.

Claim 25 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Banquy in view of Davis, as applied to claim 19 above, and further in view of Keller (U.S. Patent No. 4,650,814).

Applicant respectfully traverses the rejection. Claim 25 is dependent on claim 19, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 19 is incorporated herein to support the patentability of claim 25.

Applicant respectfully requests reconsideration and allowance of claim 25.

Claims 26 and 27 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Banquy in view of Davis, as applied to claim 19 above, and further in view of Martin (U.S. Patent No. 4,102,659, herein "Martin").

Claim 26 has been canceled without prejudice or disclaimer.

Applicant respectfully traverses the rejection. Claim 27 is dependent on claim 19, which is believed to be allowable for at least the reasons set forth above. Therefore, the discussion above for claim 19 is incorporated herein to support the patentability of claim 27.

Applicant respectfully requests reconsideration and allowance of claim 27.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6912 to facilitate prosecution of this application.

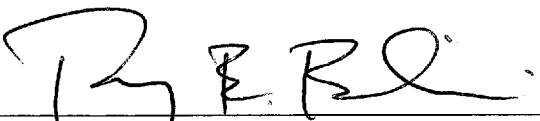
If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

NATIONAL INSTITUTE FOR STRATEGIC
TECHNOLOGY ACQUISITION AND
COMMERCIALIZATION

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being filed using the USPTO's electronic filing system EFS-Web, and is addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 19 day of June 2007.

KIMBERLY BROWN

Name


Signature